# 3.8 VISUAL RESOURCES

## 3.8.1 Affected Environment

### 3.8.1.1 Visual Resource Management

The BLM initiated visual resource management (VRM) during planning processes to manage the quality of the landscape and minimize potential impacts to visual resources resulting from development activities. In determining VRM class designations, the inventory process considers the scenic value of the landscape, viewer sensitivity to the scenery, and the distance of the viewer to the subject landscape. These management classes identify various permissible levels of landscape alteration, while protecting the overall visual quality of the region. Management classes are divided into four levels (Classes I, II, III, and IV), with Class I designated as most protective of the visual resources (see Table 3.8-1). The objectives of these classes vary from very limited management activity to activity that allows major landscape modifications.

**TABLE 3.8-1**
**BLM VISUAL RESOURCE MANAGEMENT CLASSES**

| Visual Class | Description |
|---|---|
| I | Objective: Preserve existing landscape character. This class provides for natural ecological changes. It does not, however, preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention. |
| II | Objective: Retain existing landscape character. The level of change to the characteristic landscape should be low. Management activities may be seen but should not attract a casual observer's attention. Any changes must repeat the basic elements of line, form, color and texture found in the predominant natural features of the characteristic landscape. |
| III | Objective: Partially retain existing landscape character. The level of change to the characteristic landscape should be moderate. Management activities may attract attention, but should not dominate a casual observer's view. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape. |
| IV | Objective: Provide for management activities that require major modification of the existing landscape character. The level of change to the characteristic landscape can be high. Management activities may dominate the view and be the major focus of viewer attention. Every attempt, however, should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic landscape elements. |

*Source: BLM Manual Handbook 8410-1 (USDI 1986)*

Although site-specific development plans are not identified in the proposed action, each future proposed project in leased areas would be evaluated for its impact to visual resources. Management classes are utilized to identify minimum impact levels to the visual resource when a proposed development action is analyzed using the Bureau's Visual Contrast Rating System.[14] By using this system, the impact magnitude to visual resources can be measured by separating the landscape into its major features (landform, vegetation, and structures) and predicting the magnitude of change to each of the basic visual elements (line, form, color, and texture) within each of the features. Visual analysis for proposed projects on leased areas within the assessment area would be conducted using Key Observation Points, which are locations from which a proposed project can be seen.

Once potential impacts to visual resources have been identified for each location, visual design considerations would be incorporated into proposed surface-disturbing projects on a case-by-case basis. Mitigation measures, using the following design techniques, would be developed for each site to minimize adverse impacts to visual resources and to maintain the appropriate VRM class:

- Site locations to minimize adverse affects
- Minimize disturbance during construction
- Repeat form, line, texture, and color in the design elements
- Color selection for exterior building materials
- Sensitive grading to minimize variations in natural topography
- Appropriate reclamation and restoration during project closure
- Linear alignment in design

#### 3.8.1.2 Description of the Assessment Area

The assessment area consists of approximately 2 million of the 8.3 million acres of the public lands managed by the BLM Winnemucca Field Office and consists of PVAs, KGRAs, and lease application sites. Visual resources within the assessment area are currently managed based on inventories completed in the late 1970s (see Figure 3.8-1). No lands are classified as VRM Class I within the assessment area. Approximately 6 percent of the assessment area occurs in VRM Class II, approximately 10.6 percent of the assessment area is VRM Class III, and approximately 83 percent of the assessment area is located in VRM Class IV (see Table 3.8-2).

**Dixie Valley KGRA.** The CCFO has not assigned final VRM Management Classes to the affected areas within its administration area. The potentially affected lands within Dixie Valley are managed as Class III (Callan, 2002).

[14] BLM Visual Resource Management Inventory and Contrast Rating Manuals 8410-1 and 8432-1.1

**FIGURE 3.8-1**
**ASSESSMENT AREA VISUAL MAP**

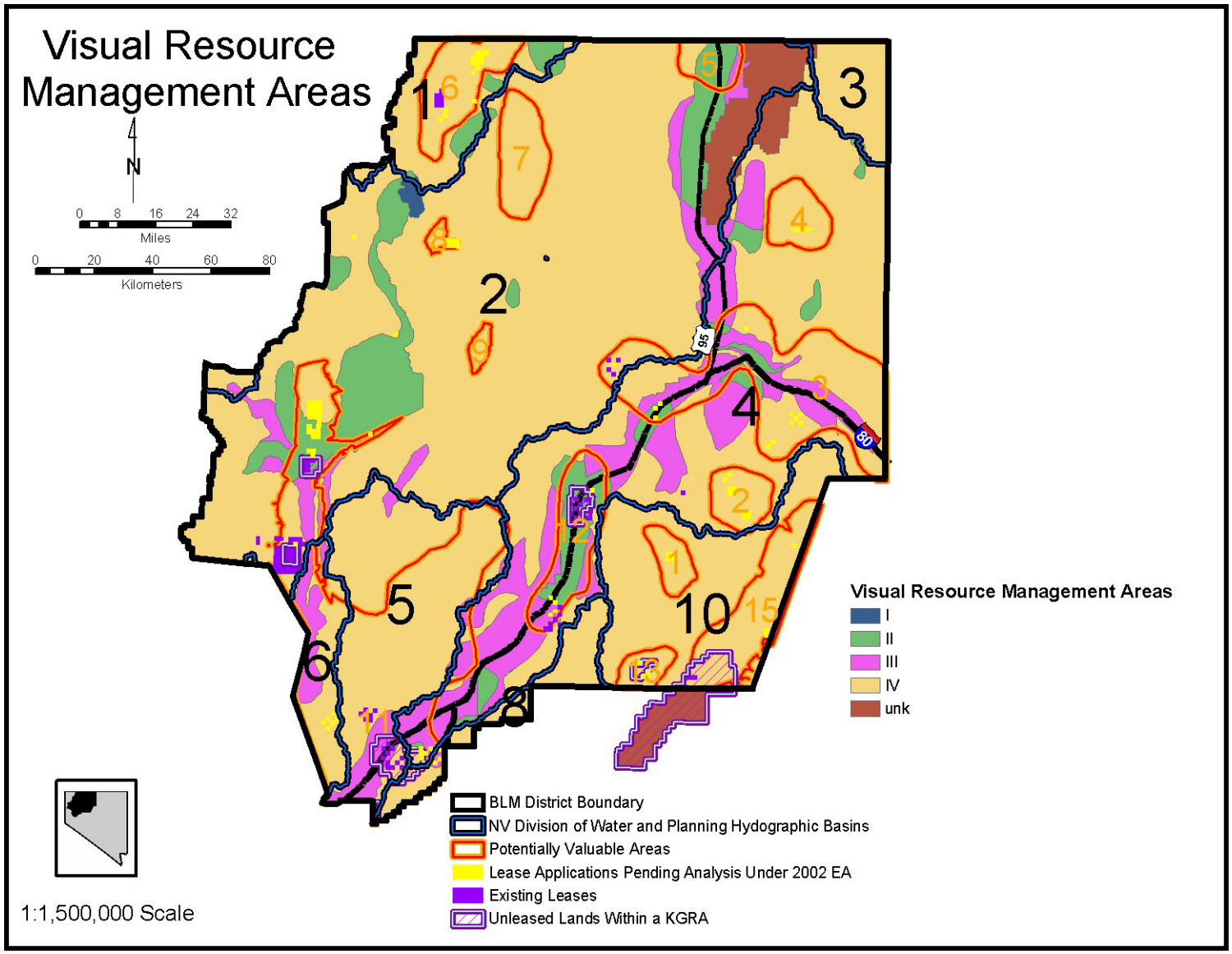

**TABLE 3.8-2**
**ACREAGES OF VISUAL RESOURCE MANAGEMENT CLASSES BY PROSPECTIVELY VALUABLE AREA**

| PVA | Class II | Class III | Class IV | Total Acreage* |
|---|---|---|---|---|
| 1 | | | 50,600 (2.4%) | 50,600 |
| 2 | | | 79,200 (3.8%) | 79,200 |
| 3 | 16,100 (.8%) | 78,300 (3.8%) | 224,700 (10.8%) | 319,100 |
| 4 | | | 75,500 (3.6%) | 75,500 |
| 5 | 23,700 (1.1%) | 7,200 (.3%) | 15,200 (.7%) | 46,100 |
| 6 | 18 (Trace) | | 134,800 (6.5%) | 134,800 |
| 7 | | | 129,600 (6.2%) | 129,600 |
| 8 | | | 14,300 (.7%) | 14,300 |
| 9 | | | 21,100 (1.0%) | 21,100 |
| 11 | 60,500 (2.9%) | 136,700 (6.6%) | 644,200 (31.0%) | 841,400 |
| 12 | 40,100 (1.9%) | 25,800 (1.2%) | 9,400 (.5%) | 75,300 |
| 13 | | | 50,200 (2.4%) | 50,200 |
| 15 | | | 239,400 (11.5%) | 239,400 |
| Total | 140,400 (6.8%) | 248,000 (11.9%) | 1,688,200 (81.3%) | 2,076,600 |

NOTE: There are no VRM Class I resources in the assessment areas
* Acreages are approximate and may extend beyond the assessment area boundaries

Private, state, and other lands are included within the management classes solely for ease of delineation of the classes on maps. However, the BLM has no jurisdiction over these lands. Development of these non-public lands could have an impact on the visual environment of adjacent public lands.

The assessment area is located within the northern Basin and Range physiographic province. Basin and range landscapes in northern Nevada are characterized by elongated, generally north-trending mountain ranges separated by broad, open basins. This type of landscape allows for long viewing distances.

The dominant natural features within the assessment area include steep rugged mountains; volcanic highlands and table lands; expansive valleys; dune fields; springs (hot and cold); streams; the Humboldt, Little Humboldt and Quinn Rivers; and associated floodplains and marshes. Man-made features include: emigrant trails, ranches, fences, irrigated and cultivated fields, power plants (two geothermal and one coal), power lines, utility corridors, Interstate-80, other main and secondary roads, OHV trails, railroads, large open pit mines, gravel pits, small

dams along the river, one large dam at Rye Patch Reservoir, repeaters, satellite dishes, communication towers, and radio towers.

A large portion of the assessment area (PVA numbers 7, 9, and the southern part of 8) is located along the Humboldt River and Interstate-80 corridors. This region contains the highest concentration of man-made features. Several towns are situated along this corridor including Valmy, Golconda, Winnemucca, Mill City, Imlay, Rye Patch, Oreana, and Lovelock. PVA numbers 1, 5, and the northwest of 8 are located in more remote areas along major secondary routes and include the towns of Denio, McDermitt, Empire, and Gerlach. These areas contain typical small community developments and facilities. The remaining PVAs are located in very remote locations where man-made features are predominantly ranch settings and access roads.

Ranch settings typically include small dwellings, outbuildings, barns, fences, trees, corrals, and fields. They are all situated on private lands, and only the larger features are visible from a distance. Newer buildings painted with light colors contrast with background landscapes. The ranches have been there for many years, and the structures tend to be weathered, blending in with the surroundings.

The mines in the area vary from highly visible to slightly visible depending on viewing distance and location. Large open pits, waste rock dumps, heap leach pads, and access and haul roads to the pits are the most visible distance features of mines.

Private residences on private lands are visible from a distance when traveling along local roads. Color contrasts between the private structures and the surrounding landscapes account for the high visibility.

### 3.8.2 Environmental Impacts

#### 3.8.2.1 Proposed Action

Direct Impacts – There are no direct impacts to issuing leases for future geothermal exploration, development, and production activities.

Indirect Impacts – When considering the "reasonably foreseeable development scenario," indirect impacts would probably not meet the criteria of VRM Class II areas. The impacts in Class III areas would probably range from severe to light, depending on the amount of development and the proximity to high-use areas. Indirect impacts in Class IV areas could be relatively minor. Potential adverse impacts to visual resources from long-term developments and facilities, such as power lines and communication sites, would be characterized in a site-specific EA and mitigated on a case-by-case basis to minimize impacts to visual resources. Mitigation measures would beneficially impact all landscapes and serve to protect the expansive scenic vistas. Depending upon the type of development lease approved, those developments that would abut the National Conservation Area, wilderness, and wilderness study areas could have an impact on the visual resources of those protected areas.

The following are the potential environmental impacts on visual resources when analyzing the "reasonably foreseeable development scenario."

**Exploration.** Direct impacts to the landform, vegetation and structural features of the characteristic landscape could occur during the exploration phase; however, these effects would usually be of short duration and localized to a small area. Drilling would temporarily impact the landscape, introducing new line, color, form and texture elements into the landscape. Brightly colored drill rigs and supporting facilities would be visible to visitors. Disturbances to soils and vegetation from drilling and seismic operations could be seen for longer periods of time.

**Development.** During the development phase, construction of roads, drill pads, pipelines, power plants and power lines would result in long term modifications to the line, form, color, and texture of the characteristic landscape. Roads, drill pads and pipelines create strong horizontal linear contrasts. Vegetation and soil removal create color, textural, and linear contrasts with adjacent areas that could be highly visible long after all the drilling and development facilities were removed. Constructed structures would have strong geometric and linear shapes, and solid colors, all contrasting with the natural landscapes and continuing throughout the life of the project.

**Production.** Throughout the life of the project all of the impacts described in the exploration and development phases would exist. Additional pipelines, wells, roads, and structures would result in more surfaces being disturbed, and increased modifications to the landscape would continue.

**Close-out.** If the project is completely shut down and reclaimed, modified landscapes would be rehabilitated, and the visual impacts would diminish with time. It can take several years for disturbed areas to return to a natural appearance. In some cases there could be lingering evidence of the disturbances. If the project is not completely shut down, the impacts could continue indefinitely.

#### 3.8.2.2 No Action Alternative

Direct Impacts – There are no direct impacts to issuing leases for future geothermal exploration, development, and production activities.

Indirect Impacts – Indirect impacts from the No Action Alternative would be similar to those described in the Proposed Action; however, updated mitigation measures and stipulations would not apply using the 1982 Geothermal EA.